Remarks – General

The prior art as taught by Logan (U.S. Patent No. 6,199,076) is basically the audio equivalent of a conventional Internet browser, complete with "forward" and "backward" commands to manually move through a linear list of sources (column 8, lines 57-60), and spoken highlights (equivalent to text headlines or titles) to enable **manual browsing** and control over the received audio (column 30, lines 59-67).

In contrast, the present invention teaches methods to create and play a far more customized program which can handle timed interruptions and automatically resuming the interrupted media stream **without manual intervention**. Other new and useful features of the present invention include allowing the playing of the customized program to be paused and **later resumed from any other player** (anywhere on the Internet, for example), **from exactly where paused.**

Specifically, **Logan does not teach**:

1) Including continuously-playing live broadcast media streams in a schedule and automatically beginning to play live broadcast media streams at a scheduled time or sequence. **Then automatically stopping the play of live broadcast media streams** after the **user-specified maximum play duration** in the schedule created by the user, and then **automatically continuing with the next scheduled media.**

2) The user being able to specify (in their schedule**) playing less than the full play duration** of archived media segments. And at the completion of the play time, and **without any user command or action required, automatically continuing with the next scheduled media.**

3) Recording, to a central location, **the offset to which partially-played archived media segments were received** so that playing can continue from the same **or from any other player,** exactly from the offset last played, and without having to first schedule or wait for any file transfer media downloads.

4) Enabling schedules to include playing media at specified repeat intervals, handling time zone differences, handling per-source and per-user digitization and network latency, and therefore allowing scheduling to 1-second resolution; all of which are required to be able to schedule interrupting media which is selected from content which is **periodically included** in live broadcast media streams.

None of the above 4 important features are taught by Logan. **All of the above 4 features are taught by the present invention,** and enable the creating of a truly customized program, which **plays automatically, and without user intervention.** The present invention's complete handling of interrupting live media enables one, for example, to be listening to one Internet radio source, then automatically listen to another for a few minutes to hear an hourly business or sports update, then **automatically switch back to the original** Internet radio source, all of this with the ease of listening to a standard radio, with no button pushes, voice commands or any other action from the listener. The prior art as taught by Logan and Treyz cannot do this.

Furthermore, to embed hyperlinks and for other functions, **Logan requires modifying the media segments** (column 19, lines 60-62), which requires the modified media segments to be stored on servers under the control of the system taught by Logan, and this involves preparation time, copyright issues, and expensive streaming-media servers and high-speed network connections.

In contrast, the present invention does not require any modification to media segments. Therefore the media servers can include those available throughout the public Internet, therefore leveraging the hugely

diverse range of media currently available on the Internet with the new scheduling capabilities of the present invention.

The Claim Objections

The claims have been substantially narrowed and completely rewritten as new claims 39-44. The typographical errors have been corrected or eliminated.

The Rejection of Claims 1-9, 17-25, 29, 30, 33-35, 37, and 38 on Logan et al. (U.S. Patent No. 6,199,076) is Overcome

The rejection of Claim 1 (Office Action, Page 3, first bullet) is partially-based on Logan handling "real time" program segments (column 39, lines 63-67), as if this was live broadcast streaming media. As detailed at column 19, lines 41-44, Applicant's reading of this prior art is that Logan is referring to a serialized program where new episodes are periodically made available, such as a weekly talk show, where an archived media segment of each new talk show is made available for download each week (column 19, lines 54-55). Logan refers to this as "sequential presentations which evolve in real time" (column 39, line 67), but these are archived media segments, complete with hyperlinks (column 40, line 1, and column 19, lines 60-65) which must be manually added by a technician (column 40, lines 27-32). Applicant respectfully submits that **Logan does not teach scheduled and automated handling of live broadcast streaming media**. Logan is only teaching how to receive serialized archived media segments.

Also in rejecting Claim 1 (Office Action, Page 3, second bullet), Examiner states that Internet radio sources inherently include "specific live media content segments having defined start times, durations and repeat intervals". Applicant has rewritten Claim 1 to more clearly state that the present invention's media player and customized schedule can specify:

a) at what exact time a media player will automatically start to play a continuously-playing live broadcast media stream, and

b) the duration the media player should play a continuously-playing live broadcast media stream, and

c) a play duration less than the actual length of an archived media segment, and

d) at what repeat intervals a first media stream should be interrupted to play an interrupting second media stream, after which the player resumes playing the said first media stream.

Prior art media players cannot do all of the above functions which are required to create a fully customized program which can be automatically played without manual intervention, and is taught by the present invention.

Office Action, Page 4, first bullet notes that Logan teaches interrupting audio. **Logan however requires manual intervention to return to the interrupted audio** (column 38, lines 65-67), whereas the present invention can do this automatically. Also, Logan only teaches returning exactly to the point of interruption (column 31, lines 52-53), whereas the present invention **teaches returning to a point earlier than the interruption, so an interrupted word or sentence can be heard in its entirety**.

Claims 2-9, 17-25, 29, 30, 33-35, 37, and 38 have been narrowed, rewritten and reduced in number to address the remainder of the Section 102 Claim Rejections on Logan.

Logan does not teach storing on a remote server how much of a partially-played archived media segment was received. The present invention teaches this, and uses this to enable one to resume

receiving stopped media at a later time – even if the player has since been powered-off and then back on.

Logan does not teach being able **to resume receiving – beginning at the exact point last received – a customized program, from a different media player than previously used**. In contrast, the present invention teaches resuming listening to a partially-played archived media segment, at the point last received, on a different media player than previously used. So, for example, at breakfast, one could **listen to the beginning of yesterday's Talk of the Nation radio show from NPR on a home media player, then resume listening to the remainder of it on one's office PC at lunch**, with the central schedule server remembering how much of which show was last received.

Logan requires the modification of the media segments to embed hyperlinks (column 38, lines 1-18 and column 40, lines 1-5) or create a "sequencing file" (column 6, lines 13-17). This is a substantial effort (column 40, lines 18-66). **The present invention does not require any such modification of the media segments**.

While Logan teaches displaying the duration of a media segment (column 12, lines 48-50), and allows manually skipping to the next segment (column 12, lines 51-52), **Logan does not teach scheduling a shorter play duration than a segment actually is, nor setting a play duration for a continuously-playing broadcast media stream**. In fact, **Logan requires manual intervention** to stop playing a broadcast media stream (column 38, lines 65-67), whereas the present invention can do this automatically. The present invention teaches creating a schedule where one usually listens to the British Broadcasting Corporation's World Service live, and automatically interrupting this twice an hour to get your local news from your local radio station's Internet media stream. No verbal commands, mouse-clicks, or other hardware or effort is required by the present invention after the schedule is created, and this one and schedule can be accessed and used from a user's home PC, work PC, or when at a friend's house. **Logan does not teach this mobility capability**.

The Rejection of Claims 11, 12, 14-16, 26-28, 31, and 32 on Logan is Overcome

Logan only teaches enabling a user to manually step through a circular list of only archived media sources as either each is fully played or the user issues a manual command to skip (column 35, lines 44-47) – requiring either patience to listen to all of a segment or the repetitive, expensive and intrusive requirement for issuing and receiving commands. The present invention teaches selecting a maximum play duration less than the length of an archived segment, and also the capability to specify a play duration for continuously-playing broadcast media streams.

Logan teaches a download-oriented system, in that media downloads must be requested in advance, then **downloaded the next day** (column 27, lines 31-32) and only then is the media available. If media not stored locally is requested, then Logan teaches that **the user is informed the media is unavailable** (column 31, lines 43-47). In contrast, **the present invention is only defined for media which is not stored locally**; all media is streaming media, and is received on-demand, and played while it is being received.

Logan does not teach automatically returning from playing a live broadcast media stream, Logan requires a command to do so (column 31, lines 49-53). **Logan requires both hardware to accept the command, and one's attention** – significant requirements in making a cost-effective player and in using the player **when one is driving an automobile** or is otherwise busy.

Logan does not teach returning prior to an interruption point. Logan can only return to a hyperlink point (column 31, lines 52-54), whereas the **present invention returns based on the offset** (time from

the beginning of the archived media segment), so return can be prior to the interruption point so an **interrupted word or sentence can be heard in its entirety** upon return.

While Logan teaches creating a single audio program schedule, Logan does not teach storing multiple customized programs, each suitable for a different use or time of day. For example, one may wish to create a customized program for weekday use which includes regular business and world-event updates. However, one may also wish to create a different customized program for receiving on weekends which includes sports and local weather updates. **The present invention teaches creating and storing multiple customized programs, and also assigning times-of-day and days-of-week when they will be enabled**. Logan does not teach this.

Rejection of Claims 10 and 36 on Treyz et al. (U.S. Patent No. 6,678,215) is Overcome

Daily repeats for an alarm clock are well-known. However, this is simply supporting a daily event. The concept of enabling a media player to automatically request a media server to play a radio station's traffic update, starting at 3:01:35 pm and playing for 2 minutes, and repeating this every 10 minutes (radio stations typically have the same schedule for content and commercials every day, accurate to the second), but only until 7:00:00 pm is new and useful, and substantially past anything currently available. Logan (column 38, lines 55-60) and Treyz (column 25, lines 26-30) only contemplate this being used as a reminder feature, not to actually request the media stream to be received from a continuously-playing live-broadcast source which only delivers the **desired information which is in the media stream at those exact and repeated minutes of the day**. Treyz does teach a single entry window 234 (column 22, lines 7-9) for a "schedule", however, this is only to provide a variety of content. Treyz does not solicit enough information to specify the time-offset (such as 1 minute and 35 seconds past the hour, beginning after 3:01:35 pm) or repeat-interval (such as every 10 minutes) required to repeatedly and easily enable receiving periodically-broadcast information (such as a traffic update which follows an advertisement).

An additional factor **not anticipated by Logan or Treyz is that there is a substantial per-source and per-user network delay** (due to audio CODEC compression, data stream distribution , network store-and-forward delays and other factors) in receiving media through a network such as the Internet. So while a traffic update may be heard through a conventional radio at exactly one minute past the hour, over the Internet, the actual update may be 32 seconds later than this. The present invention allows for this per-source delay (which will be different for different sources), as shown at entry window 715 in FIG. 7 (and described in the last point on page 20 of the specification), and adjusts playing scheduled media by this time delay. Also as described in the last point on page 20 of the specification, the present invention teaches allowing for **each user, and even each user's specified media reference** selections to modify the above per-source delay, as network delays for users will depend on both the media source's and the user's own location on a network.

The present invention also has an allowance for differences in time zones. For example, if it is desired to hear the six-o'clock news from one's hometown, which is in a different time zone, then the **player has to allow for this**. The present invention allows for this time offset (which will be different for different sources), as shown at entry window 714 in FIG. 7 (and described in the penultimate point on page 20 of the specification), and adjusts the listening time accordingly.

In summary, the present invention teaches more than the obvious of adding the repeat interval and listening time fields to Treyz in order to successfully implement repeat intervals and listening durations.

The Rejection of Claim 13 on Bodnar (U.S. Patent No. 6,544,295) is Overcome

The method taught by Bodnar (column 8, lines 55-61) to adjust for different time zones is to change the local computer's system time. This would not be helpful for the present invention since different media sources could each provide media from different time zones, and to create the customized program a requirement is to **simultaneously display each of the available media references relative to the current local time of the user** so the availability of media at particular time (relative to the user's local time and other obligations) can be viewed. When the media streams are to be played, they must be **played relative to a consistent time** reference (for example, so interrupting audio can be scheduled), and changing the local system time would only confuse users and create unnecessary implementation complexity.

The right way to handle different time zones is to indicate the time zone of the media source when the media reference is created (as shown at entry window 714 in FIG. 7, and described in the penultimate point on page 20 of the specification). When displaying available media references to a user creating their customized program, the timing information is adjusted according to the time zone in which the user is located so an informed selection decision can be made.

Additional Prior Art

Applicant notes additional prior art cited in the Office Action, and offers these comments:

1) Logan et al., U.S. Patent Application Publication 2003/0093790

Similar to U.S. Patent No. 6,199,076 to Logan, the cited prior art teaches a method of **manually** (either by hand, or with voice commands) and interactively scanning a list of suggested media and accessing the actual content. Logan requires **extensive use of "metadata"** (paragraph 0037 requires text transcript files, paragraph 0046 requires metadata, paragraph 0409 discusses two sets of labels which change depending on whether a viewer has seen a certain segment or not), so therefore does not have the capability to **easily use any media available on the Internet** (for example). To generate this metadata, extensive analysis of the media is suggested (paragraphs 0067-0073, paragraph 0410). The **present invention does not require or need such analysis**. Also, Logan does not teach **advanced scheduling features**, such as interruptions of live media segments at specified repeat intervals and following each interruption, continuing to play the interrupted archived media from a point prior to the interruption.

2) Smith et al., U.S. Patent Application Publication 2002/0133247

Smith teaches many methods for eliminating a gap in the media when switching from one media stream to another, but none of these addresses the problem of resuming play of an interrupted media stream before the point of interruption so that **an interrupted word or sentence will be heard in its entirety**, as is taught by the present invention. Smith only ensures there will not be periods of silence, and has no teaching or concern whether an interrupted word or sentence is fully repeated so it can **actually be comprehended**.

3) Bott, Special Edition Using Microsoft Windows Millennium Edition, Chapter 14 – Playing and Recording Digital Music

Bott shows that archived media segments have durations, and these are displayed by Windows Media Player. However, there is **no capability, teaching or discussion of automatically playing a predetermined duration of a continuously-playing live broadcast media stream**, nor of automatically **playing less than the full duration** of an archived media segment.

Summary

People receive media so long as they have the time or interest, or for the duration of the media. Applicant submits that enabling a media player to **automatically hop around to different media sources**, on a second-by-second basis, selectively playing the exact content desired, and scheduling interrupting media at predetermined repeat intervals to assemble a customized program is new and useful, that the methods are not obvious, nor were they the intent or teaching of Logan or Treyz.

Conclusion

By the above amendment, Applicant has narrowed and rewritten all claims to define the invention more particularly and distinctly.

Applicant therefore submits that the invention is now defined patentably over the prior art, and this application is now in condition for allowance, which action is respectfully solicited.

Very respectfully,

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Date: March 23, 2005

Inventor's Signature: Mitchell Shnier